"WASTE DETERMINATION REPORT"

ADMINISTRATIVE ORDER ON CONSENT

RE: DOCKET NO. 88-F-0012

JULY 18, 1988

I. SUBJECT MATTER

This report is submitted to the United States Environmental Protection Agency, Region VII, pursuant to Administrative Order on Consent, Docket No. 88-F-0012, Section VI, paragraphs 1(a) and 1(b).

II. WASTE CATEGORIES

Previous construction and/or remedial activities at the "site", as defined in the above-mentioned Consent Order, have led to the following basic categories of hazardous or potentially hazardous wastes:

(a) Liquid waste in 76 drums (aqueous)

(b) Liquid wastes in 5 drums (unknown characteristics)

(c) Soil pile mixed with drum heels

(d) Crushed empty drums

(e) Excavated pit soils (two piles)

(f) Other soil piles (many of which have shown to contain drum remnants)

Paragraphs 1(a) and 1(b) of Section VI of the Consent Order related to the hazard determination and decision on expected disposal and/or treatment of any wastes defined by items II(c) through II(f) as listed above.

III. EMPTY DRUMS

The stockpile of crushed empty drums, as initiated by Allstates Environmental Services, Inc., and all additional empty drums unearthed by Lafser & Schreiber, Inc. or subcontractors of Lafser & Schreiber, Inc. are anticipated to be transferred for salvage to an appropriate metals recycling company as a non-hazardous material per 40 CFR Part 261.7. An alternative avenue of disposal as a Missouri "special waste" in a TSD landfill would be expected if expeditious acceptance of these drums by a recylcer is not secured. Pursuant to 40 CFR Part 261.7(b)(I)(ii), all drums with less than 2.5 centimeters (1 inch) of residue can be handled as an empty container.

A copy of 40 CFR Part 261.7 appears below:

§ 261.7 Residues of Hazardous Waste in Empty Containers

(a) (1) Any hazardous waste remaining in either (i) an empty container or (ii) an inner liner removed from an empty container, as defined in paragraph (b) of this section, is not subject to regulation under Parts 261 through 265, or Part 268, 270 or 124 of this chapter or to the notification requirements of section 3010 or RCRA.

(2) Any hazardous waste in either (i) a container that is not empty or (ii) an inner liner removed from a container that is not empty, as defined in paragraph (b) of this section, is subject to regulation under Parts 261 through 265, or Part 268, 270 or 124 of this chapter or to the notification requirements of section 3010 of RCRA.

(b) (1) A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste listed in §§ 261.31., 261.32 or 261.33(e) of this chapter is empty if:

(i)) All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, e.g., pouring, pumping and aspirating, and

(ii) No more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner, or

(iii) (A) No more than 3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons in size, or

(B) No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 110 gallons in size.

(2) A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric.

(3) A container or an inner liner removed from a container that has held an acute hazardous waste listed in §§ 261.31, 261.32, 261.33(e) is empty if:

(i)) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

(ii) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted on the generator, to achieve equivalent removal; or

(iii) In the case of a container, the inner liner that prevent contact of the commercial chemical product or manufacturing chemical intermediate with the container, has been removed.

[45 FR 78529, Nov. 25, 1980, as amended at 47 FR 36097, Aug. 18, 1982; 48 FR 14294, Apr. 1, 1983; 50 FR 1999, Jan. 14, 1985; 51 FR 40637, Nov. 7, 1986]

IV. SOILS WITH DRUM HEELS

Since no sampling has been previously conducted on this waste pile, sampling will be conducted which is in accordance with the approved sampling plan. We expect transfer of these materials to a TSD facility for landfill disposal as either a special or a hazardous waste. This is predicated upon appropriate analytical results and any compliance requirements applicable to "land bans" currently in effect.

Any future heels/sludges/solids/ removed from unearthed drums will be sampled for a similar disposal decision process in accordance with Sampling Plan as approved by the USEPA Region VII office.

V. EXCAVATED PIT SOILS

To date, there are several piles of excavated soils which are the result of construction and/or remedial efforts at the "site" during the period of April to July of this year. Previous analyses were performed by a contract lab on behalf of Allstates Environmental Services, Inc. on the following soils:

(a) Composite soil sample consisting of side walls and bottoms of the excavated pit area.

(b) A surface "background" soil.

(c) Composite soil sampling consisting of grabs of unexcavated soils taken at depths from one to three feet during drum removal and pit liquid pumping activities by Allstates.

Current plans involve the sampling of two soil piles, which by our chronological reconstruction of activities by Midcoast Aviation and Allstates Environmental Services, represent category (c) above. Also scheduled for sampling is a pile of soil and drum heels which represents a probable volume of from 20-30 cubic yards of material.

Any soils found to be clean could be used to backfill and/or re-contour the surface areas of the site. Soils found to contain hazardous materials would be directed to a TSD for landfill disposal contingent upon these soils passing tests for the current effect land ban parameters. Since we expect these soils to pass the requirements of the current land bans, landfill of these materials at a TSD facility appears realistic at this point. We have initiated the approval process at various landfills to expedite the matter.

VI. NEW DRUM MATERIALS

New drum materials amounting to more than 2.5 centimeters (1 inch) of material discovered in any partially intact or intact drum initially uncovered by Lafser & Schreiber, Inc. or by subcontractors thereof, will be analyzed as applicable to determine the nature of any hazards and ultimate disposal decisions for any such wastes.

Such drums containing more than 2.5 centimeters (1 inch) of material will be placed on visqueen or a similar polymer sheet as mentioned above. Sampling of these materials will occur at this location in compliance with site sampling plans approved by USEPA. Ambient air monitoring of this process will be conducted utilizing the Foxboro Model Miran 1B infrared spectrometer to determine total hydrocarbons (THC). If readings above ambient background are encountered, personnel will cease operations and relocate at the mobile van communications station. Level "C" personal protective equipment will be donned there by affected personnel as outlined in the site safety plan before further handling of the materials will occur. At the completion of representative sampling, these materials will be overpacked into new 17H disposal drums for initial storage as D001 waste prior to a decision regarding ultimate disposal.

VII. CHEMICAL ANALYSES RESULTS

See Appendices A&B for data and other laboratory deliverable regarding chemical analyses performed to date on samples taken at the "site" by Allstates Environmental Services.

VIII. SAMPLING PARAMETERS

According to the "site" sampling plan dated 7/8/88, Lafser & Schreiber, Inc. anticipate sampling for the following parameters, as applicable to each particular sample matrix and physical phase:

Ignitability
Reactivity
EP toxicity
Corrosivity
Volatile organics
BNAs
Heat content (BTU)
PCBs

IX. SUMMARY STATUS OF DISPOSAL DECISIONS

Expediting of final disposal decisions for all of the wastes involved with this site has been dependent upon approval of the site sampling plan which has recently been secured. Priority of sampling at this point lies with the drummed liquid samples since these have been previously stored and were found to be hazardous by characteristic of ignitability.

This random sampling of drummed liquids, which has been completed, will validate the current assumptions based on past analysis of the pit liquids in regard to the uniformity and the hazardous characteristic of these materials. In addition, the analytical results will expedite an appropriate disposal or treatment decision for these liquids.

The composite sampling of the five drums of residual drum waste liquids pumped from drums in the pit will establish any hazards of this material and expedite the most appropriate waste disposal decision for these liquids. This sampling has also been completed.

It is our opinion again, according to 40 CFR Part 261.7, that all empty drums qualify as non-hazardous. We would hope for an expeditious approval for disposal of these as non-hazardous and/or special wastes.

An appropriate disposal decision for the "drum heels with soils" would, of course, follow from the analytical results from that sampling which is scheduled for July 19, 1988.

Decisions regarding disposal of the various soil piles are also pending on sampling of these soils as outlined in the site sampling plan dated 7/8/88. We expect the soils which do not contain drum heels to qualify as non-hazardous.

APPENDIX "A"

WASTE DETERMINTATION REPORT

M.B.A. LABS

MICROBIOLOGICAL AND BIOCHEMICAL
ASSAY LABORATORIES

P.O. BOX 9461 340 S. 68th STREET HOUSTON, TEXAS 77261

TELEPHONE NO. (713) 928-2701

SAMPLE SUBMITTED BY:	Allstates Environmental Services
DATE RECEIVED:	4-18-1988
DATE COMPLETED:	5-9-1988
LABORATORY REPORT NUMBER:	J-11971
SAMPLE IDENTIFICATION:	Soil Composite (Airport)

RESULTS

I. Reactivity

Total Available H_2S	<2 mg/kg
Total Cyanide	<0.5 mg/kg

II. Corrosivity

pH	8.80

III. E.P. TOXICITY (METALS)

Silver	<0.10 mg/l
Arsenic	<0.10 mg/l
Barium	1.20 mg/l
Cadmium	<0.10 mg/l
Chromium	<0.10 mg/l
Lead	<0.10 mg/l
Mercury	<0.0004 mg/l
Selenium	<0.10 mg/l

IV. Ignitability

Flash Point	>140°F

V. Miscellaneous

Specific gravity	2.04
Oil & Grease	80 mg/kg
TOX	<1 mg/kg

REPORTED BY Joe Kearse

M.B.A. LABS

MICROBIOLOGICAL AND BIOCHEMICAL
ASSAY LABORATORIES

P.O. BOX 9461 340 S. 66th STREET HOUSTON, TEXAS 77261
TELEPHONE NO. (713) 928-2701

SAMPLE SUBMITTED BY:	Allstates Environmental Services
DATE RECEIVED:	4-18-1988
DATE COMPLETED:	5-5-1988
LABORATORY REPORT NUMBER:	J-11970
SAMPLE IDENTIFICATION:	Area 2 & 3 Composite. (liquid)

RESULTS

I.	Reactivity	
	Total Available H_2S	<2 mg/l
	Total Cyanide	<0.1 mg/l
II.	Corrosivity	
	pH	9.40
III.	E.P. TOXICITY (METALS)	
	Silver	<0.10 mg/l
	Arsenic	<0.10 mg/l
	Barium	<0.10 mg/l
	Cadmium	<0.10 mg/l
	Chromium	<0.10 mg/l
	Lead	<0.10 mg/l
	Mercury	<0.0004 mg/l
	Selenium	<0.10 mg/l
IV.	Ignitability	
	Flash Point	122°F
V.	Miscellaneous	
	% Water	97.0%
	Specific Gravity	1.01
	Phenolics	0.221 mg/l
	Oil & Grease	25,090 mg/l

REPORTED BY _____

M.B.A. LABS

MICROBIOLOGICAL AND BIOCHEMICAL
ASSAY LABORATORIES

P.O. BOX 9461 340 S. 66th STREET HOUSTON, TEXAS 77261
TELEPHONE NO. (713) 928-2701

SAMPLE SUBMITTED BY:	Allstates Environmental Services
DATE RECEIVED:	4-18-1988
DATE COMPLETED:	5-9-1988
LABORATORY REPORT NUMBER:	J-11969
SAMPLE IDENTIFICATION:	Area 1 (Liquid)

RESULTS

I.	Reactivity	
	Total Available H_2S	<2 mg/l
	Total Cyanide	<0.1 mg/l
II.	Corrosivity	
	pH	9.00
III.	E.P. TOXICITY (METALS)	
	Silver	<0.10 mg/l
	Arsenic	<0.10 mg/l
	Barium	0.60 mg/l
	Cadmium	<0.10 mg/l
	Chromium	<0.10 mg/l
	Lead	<0.10 mg/l
	Mercury	0.001 mg/l
	Selenium	<0.10 mg/l
IV.	Ignitability	
	Flash Point	>140°F
V.	Miscellaneous	
	% Water	99.2%
	Specific Gravity	1.013
	Phenolics	0.165 mg/l
	Oil & Grease	14.5 mg/l

REPORTED BY Joe Kemm

M.B.A. LABS

MICROBIOLOGICAL AND BIOCHEMICAL
ASSAY LABORATORIES

P.O. BOX 9461 340 S. 86th STREET HOUSTON, TEXAS 77261

TELEPHONE NO. (713) 928-2701

SAMPLE SUBMITTED BY:	Allstates Environmental Labs
DATE RECEIVED:	5-6-1988
DATE COMPLETED:	5-6-1988
LABORATORY REPORT NUMBER:	J-12290
SAMPLE IDENTIFICATION:	Sample # 505-03EL

RESULTS

Flash Point	118°F

REPORTED BY Jo Kress

M.B.A. LABS
MICROBIOLOGICAL AND BIOCHEMICAL
ASSAY LABORATORIES

P.O. BOX 9481 340 S. 66th STREET HOUSTON, TEXAS 77261
TELEPHONE NO. (713) 928-2701

SAMPLE SUBMITTED BY:	Allstates Environmental Services
DATE RECEIVED:	5-6-1988
DATE COMPLETED:	5-16-1988
LABORATORY REPORT NUMBER:	J-12295
SAMPLE IDENTIFICATION:	Sample 505-03EL

RESULTS

E.P. TOX METALS	
Silver	<.1 mg/l
Arsenic	<.1 mg/l
Barium	.50 mg/l
Cadmium	<.1 mg/l
Chromium	<.1 mg/l
Lead	<.1 mg/l
Selenium	<.1 mg/l
Mercury	<0.01 mg/l
PCB	<0.10 mg/l
Reactivity	
Total Available H_2S	<1 mg/l
Total Cyanide	<0.5 mg/l
BTU Value	Does not burn (No BTU value)
% Moisture	91.7%
% Ash	7.1%
Phenols	0.35 mg/l
Oil & Grease	1310 mg/kg

REPORTED BY W. J. Krause

pH	8.7
Specific Gravity	1.05
S	<5.0 mg/kg
Cl^-	<5.0 mg/kg
Benzene	15 ug/l
Ethyl Benzene	966 ug/l
Toluene	31 ug/l
Other Priority pollutants	<0 ug/l

T J Krause

M.B.A. LABS

MICROBIOLOGICAL AND BIOCHEMICAL ASSAY LABORATORIES

P.O. BOX 9461 340 S. 66th STREET HOUSTON, TEXAS 77261
TELEPHONE NO. (713) 928-2701

SAMPLE SUBMITTED BY:	Allstates Environmental
DATE RECEIVED:	5-13-1988
DATE COMPLETED:	6-9-1988
LABORATORY REPORT NUMBER:	J-12403
SAMPLE IDENTIFICATION:	Sample 0509-CS

RESULTS

Phenolics	0.5 mg/kg
pH	8.30
E.P. TOX METALS	
Silver	<.1 mg/l
Arsenic	<.1 mg/l
Barium	.5 mg/l
Cadmium	<.1 mg/l
Chromium	<.1 mg/l
Lead	<.1 mg/l
Selenium	<.1 mg/l
Mercury	<0.001 mg/l
Oil & Grease	224 mg/kg
TOX	4.9 mg/kg

REPORTED BY Joe Kuss

Reactivity

Total Available H_2S	<2 mg/kg
Total Cyanide	<0.5 mg/kg
PCB	<0.05 mg/kg
Flash Point	>140°F

Joe Kent

APPENDIX "B"

WASTE DETERMINATION REPORT